

Method and Apparatus for Reducing High Voltage
Breakdown Events in X-ray Tubes

ABSTRACT OF THE DISCLOSURE

An X-ray tube subsystem including an X-ray tube and a grid voltage supply that reduces high voltage breakdown events. The X-ray tube provides a grid bias connection, a filament bias connection, and an anode bias connection. The grid voltage supply is connected to the grid bias connection and is adapted to produce an ion collection voltage substantially less than an electron beam focus voltage.